## What is claimed is:

1. A battery comprising a cathode, an anode, and an electrolyte,

wherein the capacity of the anode includes a capacity component obtained by insertion and extraction of a light metal and a capacity component obtained by deposition and dissolution of the light metal and is expressed by their sum, and

the electrolyte contains a light metal salt having a M-O bond (herein, M represents any of boron (B), phosphorus (P), aluminum (Al), gallium (Ga), indium (In), thallium (Tl), arsenic (As), antimony (Sb) or bismuth (Bi)).

- 2. A battery according to claim 1, wherein the light metal has a B-O bond or a P-O bond.
- 3. A battery according to claim 1, wherein the light metal has an O-B-O bond or an O-P-O bond.
- 4. A battery according to claim 1, wherein the light metal is a cyclic compound.
- 5. A battery according to claim 1, wherein the light metal is lithium bis [1, 2-benzenediolato (2-) -O, O'] borate shown in Chemical Formula 3 or lithium tris [1, 2-benzenediolato (2-) -O, O'] phosphate shown in Chemical

## Formula 4.

## [Chemical Formula 3]

## [Chemical Formula 4]

- 6. A battery according to claim 1, wherein the anode contains an anode material capable of inserting/extracting a light metal.
- 7. A battery according to claim 6, wherein the anode contains a carbon material.
- 8. A battery according to claim 7, wherein the anode contains at least one kind out of a group comprising graphite, a graphitizable carbon and a non-graphitizable carbon.

- 9. A battery according to claim 8, wherein the anode contains graphite.
- 10. A battery according to claim 6, wherein the anode contains at least one kind out of a group comprising an element, alloy or compound of a metal element or a metalloid which can form an alloy with the light metal.
- 11. A battery according to claim 10, wherein the anode contains at least one kind out of a group of an element, alloy or compound of tin (Sn), lead (Pb), aluminum, indium, silicon (Si), zinc (Zn), antimony, bismuth, cadmium (Cd), magnesium (Mg), boron, gallium, germanium (Ge), arsenic, silver (Ag), zirconium (Zr), yttrium (Y) or hafnium (Hf).
- 12. A battery according to claim 1, wherein the electrolyte contains a polymeric compound or an inorganic solid electrolyte.
- 13. A battery according to claim 1, wherein the electrolyte further contains LiPF<sub>6</sub>.
- 14. A battery according to claim 1, wherein the electrolyte further contains LiPF<sub>4</sub>.
- 15. A battery according to claim 1, wherein the electrolyte further contains  $LiN(CF_3SO_2)_2$ .

- 16. A battery according to claim 1, wherein the electrolyte further contains  $LiN(C_2F_5 SO_2)_2$ .
- 17. A battery according to claim 1, wherein the electrolyte further contains  $LiC(CF_3 SO_2)_3$ .
- 18. A battery according to claim 1, wherein the electrolyte further contains LiClO<sub>4</sub>.